PROGRAM ACCOUNTS: R&RA AND EHR

R&RA and EHR Program Support funds account for about 30 percent of the total Organizational Excellence portfolio. There are two activities that comprise Program-Funded Organizational Excellence – Intergovernmental Personnel Act (IPA) costs and Program Related Administration.

Summary of R&RA and EHR-Funded Organization Excellence

(Dollars in Millions)

(Donars in Minions)								
				Change Over				
	FY 2013	FY 2014	FY 2015	FY 2014 Estima				
	Actual	Estimate	Request	Amount	Percent			
IPA Costs	\$42.87	\$44.42	\$49.39	\$4.97	11.2%			
Program Related Administration	59.14	72.72	78.30	5.58	7.7%			
Program Related Technology	54.30	61.21	64.49	3.28	5.4%			
Other Program Related Administration	4.84	11.51	13.81	2.30	20.0%			
Total, R&RA and EHR-Funded Organization Excellence	\$102.01	\$117.14	\$127.69	\$10.55	9.0%			

Totals may not add due to rounding.

IPA Costs

IPA Costs by Appropriation

(Dollars in Millions)

(2 011415 11 1111110115)							
	EV 2012	EW 2014	EX. 2015	Change Over FY 2014 Estimate			
	FY 2013	FY 2014	FY 2015				
	Actual	Estimate	Request	Amount Percent			
Number of IPAs ¹	180	183	195	12 6.6%			
R&RA							
IPA Compensation	\$32.01	\$32.11	\$36.79	\$4.68 14.6%			
IPA Lost Consultant & Per Diem	3.47	3.35	3.80	0.45 13.4%			
IPA Travel	2.34	2.42	2.92	0.50 20.7%			
Subtotal, R&RA Costs	37.82	37.88	43.51	5.63 14.9%			
EHR							
IPA Compensation	4.18	5.53	4.60	-0.93 -16.8%			
IPA Lost Consultant & Per Diem	0.57	0.78	0.85	0.07 9.0%			
IPA Travel	0.30	0.23	0.43	0.20 87.0%			
Subtotal, EHR Costs	5.05	6.54	5.88	-0.66 -10.1%			
Total, IPA Costs ²	\$42.87	\$44.42	\$49.39	\$4.97 11.2%			

Totals may not add due to rounding.

¹Includes five IPAs in staff offices (BFA, OIRM, and OLPA) funded by Other Program Administration and included in General Program and Evaluation (P&E) activities.

²The costs associated with the five IPAs in staff offices are included in Other Program Related Administration.

A portion of NSF's workforce consists of temporary employees hired through the Intergovernmental Personnel Act (IPA) authority. IPAs remain employees of their home institution while serving alongside NSF employees during their temporary appointment. They are not paid directly by NSF and are not subject to federal pay, benefits, or other limitations. NSF reimburses the home institution using the traditional grant mechanism. IPAs are eligible to receive per diem or relocation expenses, and reimbursement for income foregone because of their assignment at NSF (i.e., lost consulting fees).

The agency uses visiting scientists and engineers to help ensure that the Foundation's funding decisions are made based on the best input from the field, and reflect fresh ideas and creativity. The expertise provided by these additional IPAs is essential to help shape the NSF research portfolio and support transformational advances across the frontiers of all fields of science, engineering, and education.

The FY 2015 Request funding of \$49.39 million for IPA costs represents an increase of \$4.97 million, or 11.2 percent, over the FY 2014 Estimate of \$44.42 million to support an IPA FTE usage level of 195 IPA FTE. This represents an increase of 12 IPAs from the FY 2014 Estimate to reach the IPA allocation of 195 IPA FTE.

FY 2015 funding for IPA Compensation is \$41.39 million, which signifies an increase of \$3.75 million over the FY 2014 Estimate. Lost Consultant and Per Diem is funded at \$4.65 million, an increase of \$520,000 over the FY 2014 Estimate. Funding increases in these two categories are associated with full usage of NSF's existing IPA FTE allocation in FY 2015.

FY 2015 funding for IPA travel is \$3.35 million, which represents a \$700,000 increase over the FY 2014 Estimate. The increase in IPA travel costs will support FY 2015 IPA FTE usage. Even with the increase in this travel-related category, NSF anticipates meeting its overall travel funding reduction target in conjunction with OMB Memorandum M-12-12, *Promoting Efficient Spending to Support Agency Operations*. Actions taken by NSF to reduce overall travel costs include: increased usage of virtual meeting technologies; decreased use of costlier refundable airline tickets; the institution of annual travel targets; and the use of automated travel financial reports. As a result, NSF directorates and offices can closely monitor and manage travel obligations to ensure that travel reduction goals are achieved.

Program Related Administration

Program Related Administration (PRA) includes two categories of activities that support the Excel as a Federal Science Agency strategic goal and that are directly funded from NSF's program accounts.

- Program Related Technology
- Other Program Related Administration

Program Related Administration

(Dollars in Millions)

			Change Over		
	FY 2013	FY 2014	FY 2015	FY 2014 I	Estimate
	Actual	Estimate	Request	Amount	Percent
Program Related Technology	\$54.30	\$61.21	\$64.49	\$3.28	5.4%
Other Program Related Administration	4.84	11.51	13.81	2.30	20.0%
Total, Program Related Administration	\$59.14	\$72.72	\$78.30	\$5.58	7.7%

Totals may not add due to rounding.

Program Related Technology

Program Related Technology (PRT) activities relate directly to NSF's programmatic investments and are funded through the Research and Related Activities (R&RA) and Education and Human Resources (EHR) accounts. NSF's FY 2015 total information technology (IT) request is \$86.49 million; \$64.49 million is funded by the R&RA and EHR appropriations as these investments relate directly to NSF's programmatic activities. The remaining \$22.0 million IT requirement is Agency Operations and Award Management- (AOAM) funded and is required in support of traditional IT administrative functions. A detailed explanation of these resources is provided in the Agency Operations and Award Management narrative.

FY 2015 Program Related Technology Investments

(Dollars in Millions)						
	FY 2013	FY 2014	Change 4 FY 2015 FY 2014			
	Actual	Estimate	Request	Amount	Percent	
PRT (R&RA and EHR)						
Mission-Support Applications Services	\$38.40	\$43.84	\$47.50	\$3.66	8.3%	
Associated IT Operations and Infrastructure	13.11	14.41	14.01	-0.40	-2.8%	
Related Security and Privacy Services	2.79	2.96	2.98	0.02	0.7%	
Total, Program Related Technology	\$54.30	\$61.21	\$64.49	\$3.28	5.4%	

Totals may not add due to rounding.

For FY 2015, NSF's information technology priorities for PRT are:

- Sustain reductions taken in previous years in order to focus on reinvesting in high priority activities to modernize merit review capabilities critical to the mission of the agency, including:
 - Migrating merit review tools built on aging, unsustainable client server technology to modern web-based technology; and
 - Modernizing pre-award and proposal intake capabilities to provide workload efficiencies to NSF staff and the research community, and make it easier and more cost effective to respond to emerging NSF business needs, such as policy changes and collection of proposal data in formats that will better facilitate reporting and analytics.
- Increase public access to NSF data by completing activities to integrate NSF's legacy mission applications and reporting systems with a designated repository or repository system where publications can be made publically available.
- Support the first year of operations and maintenance of iTRAK, the Foundation-wide strategic initiative to transition NSF from its disparate, aging financial system to a fully integrated financial management solution.
- Enhance NSF's continuous monitoring processes and solutions in alignment with federal cybersecurity priorities.

The FY 2015 Request of \$64.49 million for PRT represents an increase of \$3.28 million over the FY 2014 Estimate and will be used for the following activities and initiatives:

Mission-Support Applications and Services (+\$3.66 million, to a total of \$47.50 million)

Investments in this category support NSF program staff in completing the merit review process, including pre-award planning and activities; receipt of proposals; processing proposals; reviewing proposals; award decisions, documentation, and notification; funding awards; post-award oversight; dissemination of award results; and award close-out. Mission-related applications and services include investments such as iTRAK, Research.gov, eJacket, and FastLane.

- In FY 2015, the total request for iTRAK is \$4.39 million, which will support ongoing operations and maintenance of the iTRAK system. Seventy percent of this request will be funded by Program Related Technology and 30 percent will be funded by AOAM. In FY 2015, the PRT portion of the iTRAK request is \$3.08 million. This represents an increase of \$1.26 million from the FY 2014 Estimate. FY 2015 is the first year that iTRAK will be "live" and used as the primary system for monitoring, controlling, and executing the management and financial accountability of NSF's approximately 20,000 active awards. The increase requested is necessary for operations- and maintenance-related costs.
- Legacy mission applications, including FastLane and eJacket, provide comprehensive services for NSF staff, applicants, and awardees to manage the grants life cycle. These legacy applications support NSF business processes, providing effective mission-support technology solutions for NSF's ongoing grants management needs. For FY 2015, the total request for Legacy Mission Applications is \$29.76 million. This reflects a \$2.14 million increase from the FY 2014 Estimate. The requested increase along with funding derived from deferring planned maintenance activities for other legacy mission applications, including eJacket and FastLane, will be used for the activities below:
 - \$2.50 million, representing an increase of \$1.75 million over the FY 2014 Estimate, will be used to increase public access to NSF-funded data and publications, thereby promoting and protecting open, transparent, and responsible scientific communication consistent with the requirements of the memorandum issued by the Office of Science and Technology Policy (OSTP) on February 22, 2013. Specifically, NSF will use this funding to complete activities to integrate NSF's legacy mission applications and reporting systems with a designated repository or repository system where publications can be made publically available.
 - \$2.72 will be used to begin migration to modern web-based technology of merit review tools built on aging and unstable client server technology, including those that support merit review and reviewer management. This will increase the reliability of these mission-critical tools, provide workload efficiencies to staff, make it easier to modify systems to respond to emerging NSF business needs, and ensure the integration of these systems with iTRAK.
- To enable innovative IT applications and systems that support mission-related activities, in FY 2014 NSF is implementing an enterprise data warehouse, consistent with the priorities laid out in the OMB Memorandum *Open Data Policy Managing Information as an Asset* that will provide the foundation for these activities. Implementation of a data warehouse at the enterprise level avoids costs associated with implementing separate data warehouses or data marts for individual IT investments, enables IT tools to support critical NSF mission activities, such as increased public access to NSF data and improved evaluation and assessment of NSF investments, and achieves administrative efficiencies by centralizing and streamlining access to NSF data. In FY 2015, \$2.50 million is requested for the enterprise data warehouse. This represents a decrease of \$1.73 million from FY 2014 because the majority of implementation activities for the enterprise data warehouse will be completed in FY 2014. The funding requested for FY 2015 will allow NSF to complete implementation and begin operation of the enterprise data warehouse, which will position NSF to begin leveraging the data warehouse to support priority IT initiatives, including merit review modernization activities and the public access initiative.
- Research.gov is a community driven solution, led by NSF, that gives the general public, the science and engineering research and education community, and other stakeholders easy access to key information and services in one location (www.research.gov). Research.gov also provides services to help NSF staff plan and manage their programs and portfolios of proposals and awards. For FY 2015, the Research.gov request is \$12.17 million, which represents a \$2.0 million increase from the FY 2014 Estimate. Included within this total is \$6.0 million for the increased automation of preliminary proposal processing component of the Proposal Management Efficiencies activity. Detailed information can be found in the *Proposal Management Efficiencies* narrative contained within the NSF-wide Investments section of this request.

Associated IT Operations and Infrastructure (-\$400,000, to a total of \$14.01 million)

Investments in this category provide basic operations and maintenance funding for NSF IT. NSF's IT-enabled business infrastructure supports the operation of mission-essential IT applications and office automation activities, including its network and telecommunications requirements. This includes NSF's data center, network, hosting, phone, email, and remote access services. Network services include NSF's primary network for NSF staff, external network for NSF visitors, and connection to Internet2 for scientific purposes. Additionally, this category includes NSF's call center and customer care services. NSF provides customer care support for internal users (NSF staff) and external users (the research community including institutions, principal investigators, panelists, and other NSF visitors) 14 hours per day, five days per week. The call center assists NSF's research community of institutions and principal investigators with functions such as preparing and submitting proposals, financial reports, and progress reports to NSF. A call center, desktop support, and a walk-in center offer technical assistance to NSF staff, proposal reviewers, and visitors.

The \$400,000 decrease was achieved by leveraging strategic sourcing methods that reduced costs for several IT operations and infrastructure services.

Related IT Security and Privacy Services (+\$20,000, to a total of \$2.98 million)

Investments in this category include automated configuration management tools that manage security patches and provide proactive protection from viruses, spyware, and other threats. This includes the relative portion of NSF's network security, application security, security control testing and tools, automated vulnerability assessment tools, and remediation and intrusion detection services related to mission-support applications and services.

The \$20,000 increase in FY 2015 is associated with changes to enhance continuous monitoring processes and solutions in alignment with federal cybersecurity priorities.

Other Program Related Administration (+\$2.30 million, to a total of \$13.81 million)

FY 2015 Other Program Related Administration

(Dollars in Millions)

			Change O		Over
	FY 2013	FY 2014	FY 2015	2015 FY 2014 Estin	
	Actual	Estimate	Request	Amount	Percent
Evaluation and Assessment Capability	-	\$2.47	\$5.50	\$3.03	122.7%
Proposal Management Efficiencies	-	0.30	0.30	-	-
E-Government Initiatives	0.69	1.07	1.01	-0.06	-5.9%
General Planning and Evaluation Activities	4.15	7.67	7.00	-0.67	-8.7%
Total, Other Program Related Administration	\$4.84	\$11.51	\$13.81	\$2.30	20.0%

Totals may not add due to rounding.

In FY 2015, NSF's Other Program Related Administration (PRA) includes funding for four Foundation-wide activities:

- Capability building and enhancements to the Foundation's evaluation initiative;
- Efforts to improve the management of NSF's merit review process;
- NSF support for federal E-Government initiatives that are mission-related; and
- General planning and evaluation activities that are Foundation-wide such as the verification and validation of performance information; surveys; the Waterman Award, some American Association for the Advancement of Science (AAAS) fellowships and internships; and IPA costs for staff offices.

Evaluation and Assessment Capability, (+\$3.03 million to a total of \$5.50 million): FY 2015 Other Program Related Administration funding of \$5.50 million will enable the further development of the Foundation's Evaluation and Assessment Capability. Activities supported in FY 2015 include conducting high impact evaluations for cross-cutting high visibility programs and coordinating with the National Center for Science and Engineering Statistics (NCSES) the design of data collection instruments and methodological considerations. Detailed information can be found in the *Evaluation and Assessment Capability* narrative contained within the NSF-wide Investments section of this request.

<u>Proposal Management Efficiencies</u>, (no change for a total of \$300,000): FY 2015 Other Program Related Administration funding of \$300,000 will continue to support assessment activities in order to determine the impacts of NSF's investments in improving the merit review process and to identify further potential to enhance the process. Detailed information can be found in the *Proposal Management Efficiencies* narrative contained within the NSF-wide Investments section of this request.

<u>E-Government Initiatives (-\$60,000 for a total of \$1.01 million)</u>: In FY 2015, the funding amount for NSF program-supported and mission-related E-Government initiatives is consistent with funding requirements identified by the respective managing partner organizations.

General Planning and Evaluation Activities (P&E) (-\$670,000 for a total of \$7.0 million): FY 2015 Other Program Related Administration funding for P&E activities will be \$7.0 million to support activities such as the verification and validation of performance information; surveys; the Waterman Award, AAAS fellowships and internships; and IPA costs for staff offices. The FY 2015 funding estimate is based on the recent historical levels of Other PRA activities and projects that occurred in prior years.